Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: The Cincinnati Gas and Electric Company (CG&E)

Mailing Address: 139 East Fourth Street Room 552-A, Cincinnati, Ohio 45202

is authorized to operate an electric power generating plant located at

East Bend (Rabbit Hash), Kentucky

Source Name: CG&E East Bend Generating Station

Mailing Address: Kentucky Route 338, Rabbit Hash, Kentucky 41091-0142

Source Location: Kentucky Route 338, Rabbit Hash (East Bend)

Permit Type: Federally-Enforceable

Review Type: Title V / PSD **Permit Number:** V-97-015R2

Log Number: 54926/55684

Application

Complete Date: April 25, 2003

AFS Plant ID: 21-015-00029 **SIC Code:** 4911 **ORIS Code:** 6018

Region: Metropolitan Cincinnati (Ohio) Interstate

County: Boone

Issuance Date: December 21, 1999 **Revision Date:** August 12, 2003 **Expiration Date:** December 21, 2004

Inha C I are Discorted

John S. Lyons, Director Division for Air Quality

TABLE OF CONTENTS

<u>SECTION</u>			DATE OF REVISION	1	<u>PAGE</u>
SECTION A	PERMIT AUTHORIZATION	August	12, 2003	3	
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		August 12, 200)3	4
SECTION C	INSIGNIFICANT ACTIVITIES		August 12, 200)3	29
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Augus	t 12, 2003	32	
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS	Augus	t 12, 2003	33	
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS		August 12, 200)3	34
SECTION G SECTION H	GENERAL CONDITIONS ALTERNATE OPERATING SCENARIOS		August 12, 200 August 12, 200		37 43
SECTION I	COMPLIANCE SCHEDULE		August 12, 200)3	44
SECTION J	ACID RAIN PERMIT	Augus	t 12, 2003	45	

Permit Number: <u>V-97-015R2</u> **Page:** <u>3</u> **of** <u>49</u>

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application, which was determined to be complete on February 11, 1997, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This proposed permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to Regulation 401 KAR 50:035, Section 21(3).

The permittee shall not construct, reconstruct, or modify any emissions units without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: <u>V-97-015R2</u> **Page:** <u>4</u> **of** <u>49</u>

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 02 (02) - Unit 2 Indirect Heat Exchanger

Description:

Pulverized coal-fired, dry bottom, wall-fired unit with an electrostatic precipitator, scrubber with use of a lime slurry with a venturi quenching section, and low nitrogen oxides modified burners Number two fuel oil used for startups and flame stabilization

Maximum continuous rating: 6,313 MMBTU/hour

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators, for an emissions unit greater than 250 MMBTU/hour and commenced after August 17, 1971; and

Regulation 401 KAR 50:012, General application; and

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

- a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), and 401 KAR 51:017, particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.
- b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.
- c) Pursuant to Regulation 401 KAR 59:015 Section 5(1)(b) and Regulation 401 KAR 51:017, the sulfur dioxide emissions shall not exceed 1.2 lbs/MMBTU based on a three-hour average.
- d) Pursuant to Regulation 401 KAR 50:012 nitrogen oxides emissions shall not exceed 0.5 lbs/MMBTU based on a thirty (30) calendar day continuous rolling average.

3. <u>Testing Requirements:</u>

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

Permit Number: <u>V-97-015R2</u> **Page:** <u>5</u> **of** <u>49</u>

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. <u>Testing Requirements continued:</u>

- b) If no additional stack tests are performed pursuant to Condition 4. b), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.
- c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. **Specific Monitoring Requirements:**

- a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), Regulation 401 KAR 59:015, Section 7, Regulation 401 KAR 59:005, Section 4, 40 CFR 60, and 40 CFR 75, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4.
- b) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(20) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.
- c) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

Permit Number: <u>V-97-015R2</u> **Page:** <u>6</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. **Specific Monitoring Requirements continued:**

- d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 3-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable.
- e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 3-hour average nitrogen oxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.
- f) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), reference methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.
- g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.
- h) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value for the continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C, or 40 CFR 75, Appendix A.
- i) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).
- j) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

Permit Number: <u>V-97-015R2</u> **Page:** <u>7</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. **Specific Record Keeping Requirements:**

- a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.
- b) Records, including those documenting the results of each compliance test, shall be maintained for five (5) years pursuant to Regulation 401 KAR 50:035.
- c) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emissions unit, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.
- d) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.

6. Specific Reporting Requirements:

- a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:
 - 1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - 2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.
 - 3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

Permit Number: <u>V-97-015R2</u> **Page:** <u>8</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

a) Continued.

- 4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- 5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:
 - 1) Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.
 - 2) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standard.
 - 3) Pursuant to Regulation 401 KAR 50:012, General application, excess emissions for the emissions unit using a continuous monitoring system for measuring nitrogen oxides are defined as any thirty (30) day period during which the average emissions (arithmetic average of thirty contiguous calendar days) exceed the applicable nitrogen oxides emissions standard.
- c) The permittee shall report the number of excursions (excluding startup, shutdown, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

- a) The electrostatic precipitator and scrubber with use of a lime slurry with a venturi quenching section shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance (e.g., routine scheduled service, replacement of parts, etc.) of the control equipment shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>9</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 03 (03) - Coal Handling Operations

Description:

Equipment includes: barge unloader/receiving operations ((03-01) rated at 4500 tons/hour), stockpile operations (03-09, 03-10), conveyor E ((03-02) rated at 4500 tons/hour), and carry all bin with load-in (03-04) and load-out (03-05) (rated at 4500 tons/hour).

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions, Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. <u>Emission Limitations:</u>

None

3. <u>Testing Requirements:</u>

None

4. Specific Monitoring Requirements:

See Section F.

Permit Number: <u>V-97-015R2</u> **Page:** <u>10</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) Records of the coal unloaded and processed (tonnages) shall be maintained.

6. Specific Reporting Requirements:

See Section F.

- a) The watering and compaction on the stockpile shall be used and operated as necessary to maintain compliance with permitted emission limitations and applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and operation of the control equipment and measures mentioned in Subsection 7(a) shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>11</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 04 (03) - Coal crushing and processing operations

Description:

Equipment includes:

Conveyors A, B, C, D, F-1, G-1 and transfer points (03-02)

Primary crushers (two) (03-03)

Coal bunker load-in (03-06)

Coal pile load-in (03-07)

Coal pile reclaim (03-08)

Rated at (Tons/hour):

4500 tons/hour each
2000 tons/hour
4500 tons/hour

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Y, Standards of performance for coal preparation plants, for emissions units commenced after October 24, 1974, and Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

Pursuant to Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Y, 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. Testing Requirements:

a) Pursuant to Regulation 401 KAR 60:005, incorporating by reference 40 CFR 60 Subpart Y, 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, and more frequently if requested by the Division.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making any necessary repairs.

Permit Number: <u>V-97-015R2</u> **Page:** <u>12</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. **Specific Record Keeping Requirements:**

a) Records of the coal processed (tonnages) shall be maintained.

6. Specific Reporting Requirements:

See Section F.

- a) The enclosure and baghouses on the two crushers, and the enclosures and baghouses on the conveyors and transfer points, baghouses for the coal bunker load-in, and baghouses (same as for crushers) for the coal pile reclaim, shall be used and operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and operation of the control equipment in Subsection 7(a) shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>13</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 07 (07) - Eight Cold Cleaning Degreasers

Description:

(Note that these do not use halogenated solvents)

Construction commenced: 1981

Applicable Regulations:

Regulation 401 KAR 59:185, New solvent metal cleaning equipment, for emissions unit commenced after June 29, 1979

1. **Operating Limitations:**

Annual solvent usage rate for each degreaser shall not exceed 20 gallons per year. Compliance with annual emissions and operating limitations imposed, pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. <u>Emission Limitations/Control Equipment/Operating Requirements:</u>

- a) Pursuant to Regulation 401 KAR 59:185, Section 4(1)(a), each degreaser shall be equipped with a cover. Each cover shall be designed so that it can easily be operated with one (1) hand.
- b) Pursuant to Regulation 401 KAR 59:185, Section 4(1)(b), each degreaser shall be equipped with a drainage facility so that solvent that drains off parts removed from the cleaner will return to the cleaner.
- c) Pursuant to Regulation 401 KAR 59:185, Section 4(1)(c), a permanent, conspicuous label, summarizing the operating requirements specified in subsection (2) of Regulation 401 KAR 59:185, Section 4 shall be installed on or near the cleaner.
- d) Pursuant to Regulation 401 KAR 59:185, Section 4(1)(d), if used, the solvent spray shall be a fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.

Permit Number: <u>V-97-015R2</u> **Page:** <u>14</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

2. Emission Limitations/Control Equipment/Operating Requirements (continued):

- e) Pursuant to Regulation 401 KAR 59:185, Section 4(2), the following operating requirements shall be observed:
 - 1. Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers.
 - 2. The degreaser cover shall be closed if not handling parts in the cleaner.
 - 3. Cleaned parts shall be drained until dripping ceases (fifteen (15) seconds is usually necessary).

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

- a) See Subsection 2.
- b) See Section F.

5. **Specific Record Keeping Requirements:**

- a) Amount of solvent used weekly and the weekly hours of operation shall be recorded on an as-used basis, in order to maintain continuing compliance. (The amount of fresh solvent added to the degreasers and the amount of dirty solvent stored in waste drums shall be recorded. The difference between the two amounts shall be used to determine the amount of solvent used. A log of the solvent usage rate shall be maintained.)
- b) Records regarding the operating guidelines and control measures taken shall be maintained.
- c) See Subsection 7.

Permit Number: <u>V-97-015R2</u> **Page:** <u>15</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements:

See Section F.

- a) The requirements in Subsection 2. above shall be used as necessary to maintain compliance with applicable requirements and emission, operating, and control limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) See Section E. for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>16</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 09 (08) - Main Flyash Storage Silo Loadout to Dump Trucks

Description:

Operating rate: 150 Tons/hour Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions.

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. **Operating Limitations:**

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

Permit Number: <u>V-97-015R2</u> **Page:** <u>17</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. **Specific Record Keeping Requirements:**

a) Records of the flyash processed (tonnages) shall be maintained.

6. **Specific Reporting Requirements:**

See Section F.

- a) Adequate control measures shall be used as necessary to maintain compliance with permitted applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and operation/use of appropriate control measures shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>18</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 10 (09) - Flue Gas Desulfurization Sludge Fixing Plant

Description:

Equipment includes: conveying, transfer points, and pug mills

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 59:010, New process operations, applicable to an emissions unit commenced on or after July 2, 1975

1. **Operating Limitations:**

Operating rate: 250 tons/hour

2. <u>Emission Limitations:</u>

- a) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed $[17.31(P)^{0.16}]$ pounds per hour based on a three-hour average where P is the processing rate in tons per hour. (The permittee may assure compliance with the particulate standard by calculating emissions using the following formula: pounds PM per hour = Material throughput in Tons/Hour x 0.012 pounds per ton x (1-0.91).)
- b) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a) visible emissions shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

3. Testing Requirements:

The permittee shall determine opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. **Specific Monitoring Requirements:**

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making any necessary repairs.
- b) The permittee shall monitor the processing rate and hours of operation on a weekly basis.

Permit Number: <u>V-97-015R2</u> **Page:** <u>19</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. **Specific Record Keeping Requirements:**

- a) Records of the weekly material processed (tonnages) and the weekly hours of operation shall be maintained.
- b) Records documenting the results of each opacity reading by EPA Reference Method 9 shall be maintained.

6. **Specific Reporting Requirements:**

See Section F.

- a) The enclosures shall be used on all conveyors and transfer points, and enclosure and two hydrostatic rotoclones (wet type dust collectors) shall be used on the two pug mills and operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and operation and use of all control equipment in Subsection 7(a) shall be maintained.
- c) See Section E. for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>20</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions unit: 11 (11) - Plant Roadways

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. the maintenance of paved roadways in a clean condition;
 - 3. the prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.
- c) No one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway, pursuant to Regulation 401 KAR 63:010, Section 4.

1. Operating Limitations:

None

Permit Number: <u>V-97-015R2</u> **Page:** <u>21</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

2. <u>Emission Limitations:</u>

None

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

See Section F.

5. **Specific Record Keeping Requirements:**

a) Records of the tonnage of materials hauled shall be maintained for emissions inventory purposes.

Specific Reporting Requirements:

See Section F.

- a) Plant roadways shall be controlled with water as necessary to comply with Regulation 401 KAR 63:010.
- b) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>22</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions unit: 12 (12) - Landfill Operations

Description:

Disposal rate of Poz-o-Tec: 500 tons/hour.

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;
 - 3. the maintenance of paved roadways in a clean condition;
 - 4. the prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.
- c) No one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway, pursuant to Regulation 401 KAR 63:010, Section 4.

1. **Operating Limitations:**

None

Permit Number: <u>V-97-015R2</u> Page: <u>23</u> of <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

2. Emission Limitations:

None

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

See Section F.

5. Specific Record Keeping Requirements:

a) Records of the disposal rate (tonnages) shall be maintained.

Specific Reporting Requirements:

See Section F.

- a) Watering shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and use of the control measures in Subsection 7(a) shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>24</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 13 (10) - Emergency Diesel Generator

Description:

Number two fuel oil-fired unit

Maximum continuous rating: 7.7 MMBTU/hour

Construction commenced: 1976

Applicable Regulations: The emissions unit is not subject to any applicable regulations.

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

See Section F.

5. Specific Record Keeping Requirements:

- a) Records of the amount of fuel used shall be maintained.
- b) See Section F.

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

NA

Permit Number: <u>V-97-015R2</u> **Page:** <u>25</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 14 (04) - Lime Handling Operations (Fugitive Emissions)

Description:

<u>Unit</u>	Operating Rate in Tons/hour
Lime Barge Unloading Operations (04-09)	600
Lime Barge Unloader Hopper (04-10)	600
Main Lime Silo Truck Dump (04-12)	25
Main Lime Silo Truck Loading (04-14)	25
Dump Truck to Fix Plant Lime Hopper (Unloading)	(04-15) 25

Construction commenced: 1976

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions, and Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - 2. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. <u>Emission Limitations:</u>

None

Permit Number: <u>V-97-015R2</u> **Page:** <u>26</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

See Section F.

5. **Specific Record Keeping Requirements:**

a) Records of the lime received and processed (tonnages) shall be maintained.

Specific Reporting Requirements:

See Section F.

- a) The enclosures, partial enclosures, and baghouses shall be operated and used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance and operation/use of the the enclosures, partial enclosures, and baghouses shall be maintained.
- c) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>27</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions unit: 15 (01-022) – Synfuel Operations (PM and VOC Emissions)

Description:

Description.				
	<u>Unit</u>	Operating Rate in Tons/hour		
EP #01	Transfer Point 1 and Conveyor Belt	4500		
EP #02, 03, and 19				
	Transfer Points 2 and 3, Stacking Tube, and Pile	4500		
EP #04, 05, and 18				
	Transfer Points 4 and 5, and Front End Loader	500		
EP #06	Transfer Point 6 and Receiving Hopper	500		
EP #7	Transfer Point 7 and Conveyor to Screw	500		
EP #8	Transfer Point 8 and Screw to One Mixer	500		
EP #9	Transfer Point 9 and Mixer	506.25		
EP #10	Transfer Point 10 and Conveyor	506.25		
EP #11	Transfer Point 11 and Synfuel Pelletizer	506.25		
EP #12	Transfer Point 12 and Conveyor from Pelletizer	506.25		
EP #13	Transfer Point 13 and Conveyor to Plant	506.25		
EP #14	Transfer Point 14 and Conveyor to Stacker	506.25		
EP #20	Stacking Tube and Pile	506.25		
EP #15, 16, and 17				
	Transfer Points 15 and 16, and Bulldozer	1000		
EP #21	30,000-gallon Fixed Roof Synfuel Tank	6.25		
EP #22	30,000-gallon Fixed Roof Synfuel Tank	6.25		

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions, and Regulation 40 CFR 60, Subpart Kb -- Standards of Performance for Volatile Organic Liquid

Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (60.110b--60.117b)

1. **Operating Limitations:**

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne.
 - Reasonable precautions shall include, when applicable, the application and maintenance of water, or suitable chemicals on materials stockpiles.
- b) Pursuant to the request of the permittee, the maximum operating rate shall be 1.8×10^6 tpy of coal through the synfuel operations. This operating limit shall be based on processing rates for any twelve (12) consecutive months.

Permit Number: <u>V-97-015R2</u> **Page:** <u>28</u> **of** <u>49</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

1. **Operating Limitations (continued):**

c) Pursuant to the request of the permittee, the maximum operating rate shall be 22,500 tpy total of binding agent through the two 30,000-gallon binding agent tanks and mixer. This operating limit shall be based on processing rates for any twelve (12) consecutive months.

Compliance Demonstration:

Compliance for a) - The permittee shall certify compliance with all the terms and condition contained in this permit. See Section F

Compliance for b) and c) - See Specific Monitoring and Record Keeping Requirements

2. <u>Emission Limitations:</u>

Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

See Section F.

5. Specific Record Keeping Requirements:

- a) Records of the coal received and processed (tonnages) shall be maintained on a monthly basis and kept for 2 years from the date of the activity.
- b) Records of the binder type and the amount received and processed shall be maintained on a monthly basis and kept for 2 years from the date of the activity.
- c) Pursuant to Regulation 40 CFR 60, Subpart Kb, the owner or operator of the two 30,000-gallon fixed roof storage tanks, used for storage of a volatile organic liquid with a maximum true vapor pressure less than 15 kPa, shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- d) The temperature of the binder in each tank and mixer shall be recorded weekly, or more often as necessary to make emission calculations, if constant temperatures are not achieved.

6. Specific Reporting Requirements:

See Section F.

- a) The watering and compaction on the stockpile shall be used and operated as necessary to maintain compliance with permitted emission limitations and applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b) See Section E for further requirements.

Permit Number: <u>V-97-015R2</u> **Page:** <u>29</u> **of** <u>49</u>

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant, the permittee must comply with the applicable regulations. Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected weekly and a qualitative visible emissions evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density, (heavy or light), cause and any corrective actions taken for any abnormal visible emissions.

<u>Description</u>	Generally Applicable Regulation
1. Main fuel oil storage tank, 500,000 gallons capacity, point 05-01.	NA
2. Fuel oil day tank, 40,000 gallons capacity, point 05-02.	NA
3. Landfill garage fuel oil tank, capacity 6,000 gallons, point 05-03	. NA
4. Landfill portable fuel oil tank, 2,000 gallons capacity, point 05-0)4. NA
5. Landfill garage portable fuel oil tank (yellow) 500 gallons capac point 05-06.	rity, NA
6. Emergency diesel generator fuel oil tank, 500 gallons capacity, point 05-20.	NA
7. Diesel powered fire pump fuel oil tank, 500 gallons capacity, point 05-21.	NA
8. FGD fixing plant portable gasoline tank (red) 250 gallons capacipoint 06-07.	ty, NA
9. Coal yard gasoline tank, 500 gallons capacity, point 06-09.	NA
10. Diesel powered fire pump, 285 horsepower, point 10-01.	NA
11. Flyash handling operations, pneumatic dry enclosed transfer, other than point 09 (08).	401 KAR 59:010 and/or KAR 63:010
12. Lime handling operations, other than point 14 (04).	401 KAR 59:010 and/or 401 KAR 63:010
13. Wet ash and ponded ash handling and management.	401 KAR 63:010
14. Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.	NA

Permit Number: <u>V-97-015R2</u> **Page:** <u>30</u> **of** <u>49</u>

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Generally Applicable Regulation
401 KAR 63:010
NA
NA
NA
401 KAR 63:010
401 KAR 63:010
NA
NA

Permit Number: <u>V-97-015R2</u> **Page:** <u>31</u> **of** <u>49</u>

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u> <u>Generally Applicable Regulation</u>

24. Water based adhesives that are less than or equal to five percent by volume volatile organic compounds, excluding hazardous air pollutants.

NA

25. Unit 2 Mechanical draft cooling tower.

401 KAR 63:010

Permit Number: <u>V-97-015R2</u> **Page:** <u>32</u> **of** <u>49</u>

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

Permit Number: <u>V-97-015R2</u> **Page:** <u>33</u> **of** <u>49</u>

SECTION E - SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS

Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any emissions unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Permit Number: <u>V-97-015R2</u> **Page:** <u>34</u> **of** <u>49</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a) Date, place as defined in this permit, and time of sampling or measurements;
- b) Analyses performance dates;
- c) Company or entity that performed analyses;
- d) Analytical techniques or methods used;
- e) Analyses results; and
- f) Operating conditions during time of sampling or measurement.
- 2. Records, of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
- 3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c), the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b) Have access to and copy, at reasonable times, any records required by the permit:
 - i) During normal office hours, and
 - ii) During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency; and
 - d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency.

Permit Number: <u>V-97-015R2</u> **Page:** <u>35</u> **of** <u>49</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Florence Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. The reports are due within 30 days after the end of each six month reporting period which commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
- 6. a) In accordance with the provisions of Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Florence Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - i) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b) In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Florence Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

Permit Number: <u>V-97-015R2</u> **Page:** <u>36</u> **of** <u>49</u>

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality and the U.S. EPA in accordance with the following requirements:

- a) Identification of each term or condition of the permit that is the basis of the certification;
- b) The compliance status regarding each term or condition of the permit;
- c) Whether compliance was continuous or intermittent;
- d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to Regulation 401 KAR 50:035, Section 7(1) (c), (d), and (e);
- f) The certification shall be postmarked by the thirtieth (30th) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Florence Regional Office 8020 Veterans Memorial Drive Suite 110 Florence, Kentucky 41042 U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, Kentucky 40601.

- 8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission report is mailed to the permittee.
- 9. Pursuant to Section VII.3 of the Policy Manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days after the completion of the fieldwork.

Permit Number: <u>V-97-015R2</u> **Page:** <u>37</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS

a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7 (3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b) If any additional applicable requirements of the Acid Rain Program become applicable to the source;
 - c) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)(3)e and 401 KAR 50:035, Permits, Section 7(3)(j)]

Permit Number: <u>V-97-015R2</u> **Page:** <u>38</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

a) General Compliance Requirements (continued)

5. The permittee upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

- 6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
- 7. Pursuant to Regulation 401 KAR 50:035, Section 7(3)(e), the permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.
- 8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within (ninety) 90 days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
- 11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7(3)(g)]
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of the U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
- 14. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
- 15. <u>Permit Shield</u>: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.

Permit Number: <u>V-97-015R2</u> **Page:** <u>39</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

a) General Compliance Requirements (continued)

- 16. The permittee may conduct test burns of materials other than those listed in the permit without a construction permit or a reopening of this permit provided that:
 - a) Notification is provided to the Division at least thirty (30) days prior to initiation of the test burning of the material;
 - b) The source complies with all applicable regulations and emission limitations;
 - c) The permittee agrees to perform such additional testing as may be required by the Division.
- 17. The permanent burning of any material (addressed in above condition) shall be allowed upon completion of testing provided that:
 - a) The Division determines that a permit is not required. Such determination shall be made within sixty (60) days of the application receipt along with the test results;
 - b) The permittee keeps records of the date and time of burn;
 - c) The permittee keeps records of analysis and feed rate of material;
 - d) Burning any of those materials shall not be subject to any new applicable regulation and the source shall comply with all applicable regulations and emission limitations.
- 18. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.
- 19. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions and opacity limitations listed in this permit shall apply at all times except during periods of startup and shutdown in accordance with Regulation 401 KAR 50:055, provided the permittee complies with the requirements of Regulation 401 KAR 50:055.
- 20. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
- 21. All previously issued construction and operating permits are hereby subsumed into this permit.

b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete application submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035, Permits, Section 12]

Permit Number: <u>V-97-015R2</u> **Page:** <u>40</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

d) Acid Rain Program Requirements

- 1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- 2. The permittee shall comply with all requirements and conditions of the Title IV Acid Rain Permits (A-98-014, Attachment C) and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) issued for this source. The permittee shall also comply with all requirements of any revised or future acid rain permit(s) issued for this source.

e) Emergency Provisions

- 1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - i) An emergency occurred and the permittee can identify the cause of the emergency;
 - ii) The permitted facility was at the time being properly operated;
 - iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2., and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (e)1., above, are in addition to any emergency or upset provision(s) contained in an applicable requirement.

Permit Number: <u>V-97-015R2</u> **Page:** <u>41</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

e) Emergency Provisions (continued)

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

f) Risk Management Provisions

- 1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan (RMP) and comply with the Risk Management Program. The permittee shall submit the RMP on diskette to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA 22116-3346.

b. Submit additional relevant information if requested by the Division or the U.S. EPA.

g) Ozone Depleting Substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined in 40 CFR 82.152) shall comply with the record keeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

Permit Number: <u>V-97-015R2</u> **Page:** <u>42</u> **of** <u>49</u>

SECTION G - GENERAL CONDITIONS (CONTINUED)

g) Ozone Depleting Substances (continued)

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

Permit Number: <u>V-97-015R2</u> **Page:** <u>43</u> **of** <u>49</u>

SECTION H - ALTERNATE OPERATING SCENARIOS

None

Permit Number: <u>V-97-015R2</u> **Page:** <u>44</u> **of** <u>49</u>

SECTION I - COMPLIANCE SCHEDULE

None

Permit Number: <u>V-97-015R2</u> **Page:** <u>45</u> **of** <u>49</u>

SECTION J - ACID RAIN PERMIT

Commonwealth of Kentucky Natural Resources and Environmental Protection Cabinet Department for Environmental Protection Division for Air Quality

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

PHASE II ACID RAIN PERMIT

Plant Name: East Bend Station					
Plant Location: KY Route 338, Rabbit Hash, Kentucky					
Owner: Cinergy Corporation					
Mailing Address: P. O. Box 960, Cincinnati, Ohio 45201-0960					
Region: Metro. Cincinnati Interstate		County: Boone			
Effective Date	From: January 1, 2000	To: December 31, 2004			

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NOx requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II application, the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plan.
- 5) Summary of Actions

1. Statement of Basis:

Permit Number: <u>V-97-015R2</u> **Page:** <u>46</u> **of** <u>49</u>

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 50:035, Permits, 401 KAR 50:072, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

Permit Number: <u>V-97-015R2</u> **Page:** <u>47</u> **of** <u>49</u>

PERMIT (Conditions)

Plant Name: East Bend Station

Affected Unit: 2

2. SO₂ Allowance Allocations and NO_x Requirements for the affected unit:

SO ₂ Allowances	Year				
	2000	2001	2002	2003	2004
Tables 2, 3 or 4 of 40 CFR Part 73	18,315*	18,315*	18,315*	18,315*	18,315*

NO_x Requirements

NO_x Limits

- (i) Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2000 through 2004. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/mmBtu. In addition, this unit shall not have an annual heat input less than 50,700,000 mmBtu.
- (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.
- If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A) and (B)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation and annual heat input limit set in condition (i).
- In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.
- In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.
- The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned condition does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

Permit Number: <u>V-97-015R2</u> **Page:** <u>48</u> **of** <u>49</u>

3. Comments, Notes, and Justifications:

- 1. Affected unit is one (1) dry bottom wall-fired boiler.
- 2. A revised Phase II NOx Averaging Plan was received on January 08, 2001.
- 3. All previously issued Acid Rain permits are hereby null and void
- 4. Nitrogen Oxide Compliance Plan for the facility remains unchanged since November 16, 1999.
- 5. Initial Compliance Plan was submitted with A-98-014 Revision 1 application

4. Permit Application: Attached

The Phase II Permit Application the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plans are part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application, the revised Phase II NOx Compliance Plan, and the revise Phase II NOx Averaging Plan.

5. Summary of Actions:

Previous Actions:

- 1. Draft Phase II Permit (# AR-96-08) including SO₂ compliance was issued for public comments on September 19, 1996.
- 2. Final Phase II Permit (# AR-96-08) including SO₂ compliance plan was issued on December 11, 1996.
- 3. Draft Phase II Permit (# A_98-014) was advertised in the 1998 revised SO2 allowance allocations and NOx emissions averaging plan for public comment on December 8, 1998.
- 4. Final Phase II Permit (# A-98-014) was issued with the 1998 revised SO2 allowance allocations and NOx emissions averaging plan.
- 5. Draft Phase II Permit (# A_98-014 Revision 1) was advertised in the 1999 revised SO2 allowance allocations and NOx emissions averaging plan for public comment on March 29, 2000.
- 6. Final Phase II Permit (# A-98-014 Revision 1) was issued with the 2000 revised SO2 allowance allocations and NOx emissions averaging plan.
- 7. Draft Phase II Permit (# A-98-014 Revision II) has been issued with the 2000 revised SO_2 allowance allocations and NO_x emissions averaging plan for public comment.

Permit Number: <u>V-97-015R2</u> **Page:** <u>49</u> **of** <u>49</u>

Present Action:

1. Final Phase II Permit (# V-97-015) has been issued with the 2000 revised SO_2 allowance allocations and NO_x emissions averaging plan.